

A part of The University of Texas Health Science Center at Houston

JOHN P. McGovern Lectureship IN BIOMEDICAL COMPUTING AND IMAGING

Volumetric Filtering, Segmentation and Visualization for Molecular Imaging



Chandrajit Bajaj, Ph.D.
Director,
Center for Computational Visualization
University of Texas at Austin

Dr. Bajaj will present novel algorithms for fully automatic volumetric filtering and boundary segmentation and demonstrate their applications in molecular structure extraction of 3D Maps reconstructed from electron cryomicroscopy as well as in-vivo molecular tomographic imaging. He will also present an interactive volumetric viewer, using multi-resolution wavelet compression for efficient surface and volumetric rendering for large 3D Maps on today's PC desktop.

Chandrajit Bajaj is the *CAM Chair in Visualization* Professor of computer sciences at the University of Texas at Austin, as well as the director of the Center for Computational Visualization, in the Institute for Computational and Engineering Sciences (ICES). Bajaj's research areas span Image Processing, Geometric Modeling, Computer Graphics, Visualization, and Computational Mathematics. His current research topics include de-noising, reconstruction and compression algorithms for volumetric and time-dependent imaging; as well as data structures that support multi-resolution finite element approximations of large geometries and multiple function fields.



DATE: Wednesday, February 11, 2003

TIME: 4:00PM - 5:30PM

PLACE: Trevisio Restaurant, 6th floor,

John P. McGovern Medical Center Commons,

6550 Bertner Ave., Houston, TX 77030

Parking in the Commons will be validated by Trevisio Restaurant For information contact Dr. Yao Cong at 713.500.3981